

IN THE CLAIMS:

1-18. (Canceled).

1 19. (Currently amended) A data transfer system for transferring data from a source
2 to multiple data sink objects in a computer system, wherein the data source is coupled
3 to the computer, the system comprising:

4 an interface for communicating with the data source to receive the data from
5 the data source;

6 a data processor for encapsulating the data into a data object in the memory;

7 and

8 a data server for ~~sending providing~~ to the multiple data sink objects identifica-
9 tion information identifying the data object;

10 wherein the multiple data sink objects access the data object using the identifi-
11 cation information and share the data object with other data sink objects to prevent
12 extraneous copies of the data.

1 20. (Original) The system of claim 19 wherein the data server includes a list list-
2 ing the multiple data sink objects that are registered with the data server.

1 21. (Currently amended) The system ~~method~~ of claim 19 wherein the computer
2 system provides a technical computing environment.

1 22. (Original) The system of claim 19 wherein the data server provides a pointer
2 indicating the location of the data object in the memory to identify the data object.

1 23. (Currently amended) The system of claim 19 further comprising at least one ~~or~~
2 ~~more~~ data listener object that is registered to a respective one of the multiple data sink
3 objects.

1 24. (Currently amended) The system of claim 23 wherein the respective data sink
2 object deletes each of the at least one ~~all~~ data listener objects registered with the re-
3 spective data sink object when the respective data sink object is deleted.

1 25. (Currently amended) The system of claim 23 wherein the respective data sink
2 object ~~notifies~~ each of the at least one ~~the~~ data listener objects registered with the
3 respective data sink object when the respective data sink object is deleted.

1 26. (Currently amended) The system of claim 23 wherein the respective data sink
2 object ~~notifies~~ each of the at least one ~~the~~ data listener objects when the respective
3 data sink object is updated with a new data object.

1 27. (Original) The system of claim 19 wherein the data source provides data se-
2 quence continuously for a period of time.

1 28. (Original) The system of claim 19 wherein the data source provides a package
2 of data, the package of data being used independently of other packages of data.

1 29. (Original) The system of claim 28 wherein the package of data includes a
2 frame of image data.

1 30. (Original) The system of claim 28 wherein the package of data includes a scan
2 of radar, sensor, or audio data, as well as network data packets.

1 31. (Currently amended) The system of claim 19 wherein the data processor con-
2 figures a maximum amount of memory that all data objects use[s] at a given instance
3 of time.

1 32. (Original) The system of claim 19 further comprising a processor for control-
2 ling the interface, the data processor, and the data server, wherein the processor is 64
3 bits or more.

1 33. (Original) The system of claim 19 wherein the interface, the data processor,
2 and the data server are implemented independently of MATLAB.

1 34. (Currently amended) A computer readable medium holding instructions ex-
2 ecutable in a computer system, wherein the computer system receives data from a data
3 source and transfers the data to data sink objects, comprising:
4 communicating with the data source to receive the data from the data source;
5 encapsulating the data into a data object in the memory; and
6 a data server object sending ~~providing~~ to the data sink objects identification
7 information identifying the data object, wherein the data sink objects access the data
8 object using the identification information and share the data object with other data
9 sink objects to prevent extraneous copies of the data.

1 35. (Original) The medium of claim 34 further comprising a data sink listener ob-
2 ject that is registered with one or more of the data sink objects.

1 36. (Currently amended) The ~~method~~ medium of claim 34 wherein the computer
2 system provides a technical computing environment.

1 37. (Currently amended) The medium of claim 35 wherein the data sink listener
2 object performs a task relating to a function of a respective one of the data sink ob-
3 jects.

1 38. (Currently amended) The medium of claim 35 wherein the data sink listener
2 object performs a task relating to a function of a respective one of the data sink ob-
3 jects on a thread of the data server object.

1 39. (Currently amended) The medium of claim 35 wherein the data sink listener
2 object performs a task relating to a function of a respective one of the data sink ob-
3 jects on a thread different from that of the data server object.

1 40. (Currently amended) The medium of claim 34 wherein at least one of the data
2 sink objects performs a function on a thread of the data server object.

1 41. (Currently amended) The medium of claim 34 wherein at least one of the data
2 sink objects performs a function on a thread different from that of the data server ob-
3 ject.

1 42. (Original) The medium of claim 34 wherein the instructions are run independ-
2 ently of MATLAB.

1 43. (Original) The medium of claim 34 wherein the instructions are originated
2 from code written with C programming language.

1 44. (Original) The medium of claim 34 wherein the instructions are originated
2 from code written with an object-oriented programming language such as C++, C#
3 and Java.